

WHAT IS CLAIMED IS:

1. A method for manufacturing a liquid cartridge, which comprises a liquid accommodating chamber for containing a liquid; a hollow part having a liquid supplying opening, into which a liquid supplying needle of a liquid ejecting apparatus is inserted, while said liquid supplying opening communicates with said liquid accommodating chamber; a seal member contained in said hollow part, said seal member having an insertion opening being in elastic contact with an external circumference of said liquid supplying needle, while said liquid supplying needle is inserted to said insertion opening; a supply valve contained in said hollow part, said supply valve arranged in order to close or open said insertion opening of said seal member; and an urging member for urging said supply valve toward said seal member, comprising steps of:

an urging member insertion step of inserting said urging member into said hollow part from said liquid supplying opening;

a seal member mounting step of mounting said seal member on said liquid supplying opening; and


a supply valve insertion step of inserting said supply valve into said hollow part from said insertion opening of said seal member mounted in said liquid supplying opening inserted during said seal member mounting step, and forming a state where said supply valve is pressed by an urging force of said urging member.

2. A method for manufacturing a liquid cartridge as claimed in claim 1, wherein said urging member insertion step comprises a step of inserting a coil spring as said urging member into said hollow part from said liquid supplying opening, and

in said supply valve insertion step, said supply valve

is inserted into said hollow part against an urging force of said coil spring by engaging said supply valve with said coil spring.

3. A method for manufacturing a liquid cartridge as claimed in claim 1, wherein said seal member mounting step comprises a step of mounting said seal member in said liquid supplying opening of said liquid supplying part into which said urging member is inserted during said urging member insertion step.

4. A liquid cartridge comprising: 
 a liquid accommodating chamber for containing a liquid;
 a hollow part having a liquid supplying opening, into which a liquid supplying needle of a liquid ejecting apparatus is inserted, while said liquid supplying opening communicating with said liquid accommodating chamber;

a seal member contained in said hollow part, said seal member having an insertion opening being in elastic contact with an external circumference of said liquid supplying needle, while said liquid supplying needle is inserted to said insertion opening;

a supply valve contained in said hollow part, said supply valve arranged in order to close or open said insertion opening of said seal member; and

an urging member for urging said supply valve toward said seal member,

wherein said supply valve comprises:

a body part having a circular cross-section, of which a diameter is substantially the same as a diameter of said hollow part of said liquid supplying part, and having a cylindrical shape, of which a height is higher than said diameter of said hollow part of said liquid supplying part;

a taper part formed at a first end of said body part, said taper part having an end engaged with said urging member; and

a bottom face formed at a second end of said body part, said bottom face having a flat surface being in contact with said seal member.

5. A liquid cartridge as claimed in claim 4, wherein said urging member is a coil spring, and

a distance between said taper part engaged with said first end of said coil spring in said hollow part of said liquid supplying part and a spring seat for preventing said second end of said coil spring from moving in said hollow part is longer than said height of said body part of said supply valve, when said bottom face of said supply valve is in contact with said seal member.

6. A liquid cartridge as claimed in claim 4, wherein a diameter of said body part of said supply valve is larger than a diameter of said liquid supplying needle inserted from said liquid supplying opening to allow said supply valve to slide in said hollow part.

7. A liquid cartridge as claimed in claim 4, wherein said urging member is a coil spring, and

said supply valve has a concave part for accepting said coil spring to urge said supply valve.